

**ESM Table 2:** Longitudinal Mixed Model Exploring the Effect of Demographic and Clinical Characteristics on Log-FCP Levels over Time among DA Positive Participants, Including the Effect of Double versus Single DA: Parameter Estimates and 95% Confidence Limits

Effect	Estimate	Lower 95% Confidence limit	Upper 95% Confidence limit
Onset age <10	-0.5835	-0.6694	-0.4977
Female sex	0.1094	0.02408	0.1946
Non-White race	0.2387	0.1255	0.3519
HLA susceptible	-0.01534	-0.1013	0.07065
Baseline HbA1c (%)	-0.1996	-0.2324	-0.1668
Baseline BMI-Z	0.1699	0.1251	0.2146
DM duration (months)	-0.03789	-0.04116	-0.03463
Double DA at baseline	0.06880	-0.04025	0.1779
DM Duration * Baseline DA	-0.00726	-0.01176	-0.00276

Models also adjusted for time varying FPG and site

FCP=fasting C peptide, DA=diabetes autoantibodies ; NHW=Non-Hispanic white; HLA=human leucocyte antigen; A1c= Hemoglobin HbA1c; BMI=body mass index; DM=diabetes

This model shows that presence of double (versus single) DA positivity at baseline is associated with faster FCP decline over time, because there is a significant interaction between presence of double DA at baseline and DM duration on FCP levels.

Model fit statistics: -2 Res. Log Likelihood = 4636.2; AIC =4644.2; AICC=4644.2; BIC=4663.2

